

VASIL'YEV, B.G., kand.tekhn.nauk

Estimating the strength of rocks in breaking them with a
concentrated percussive load. Nauch.zap. Ukrniiproekta no.3:
58-63 '60. (MIRA 14:12)

(Boring)

FARAFONOV, I.I., kand.tekhn.nauk; VASIL'YEV, B.G., kand.tekhn.nauk

Results of testing hard-faced bits in combination drilling with
hydrodrills. Nauch.zap. Ukrniiproekta no.2:141-151 '60.
(MIRA 15:1)

(Boring machinery--Testing)

VASIL'YEV, B.G., inzh.; MALYSHEV, A.S., inzh.; SAZONOV, V.P., inzh.

Use of synthetic materials in ship piping and systems. Sudostroenie 30
no.8:55-58 Ag '64. (MIRA 18:7)

VASIL'YEV, B.G., inzh.; MALYSHEV, A.S.

Use of synthetic materials in the fabrication of ship fittings.
Sudostroenie 30 no.8:58-63 Ag '64. (MIRA 18:7)

VASIL'YEV, B.I.; LEBEDEV, Yu.A.

Making ingot molds on conveyors. Lit. proizv. no.2:40-41 F
'63. (MIRA 16:3)
(Ingot molds) (Molding (Founding))

VASIL'YEV, B.I., inzh.

Results of experimental investigations in longitudinal ship
launching. Sudostroenie 28 no.1:51-54 Ja '62. (MIRA 16:7)

(Ships: Launching)



VASIL'YEV, B.I., inzh.; KURILENKO, N.I., inzh.

Determining forces acting on the checking devices during ship
launching. Sudostroenie 29 no.6:40-41 Ja '63. (MIRA 16:7)
(Ships--Launching)

FOMENKO, V.A.; VASIL'YEV, B.I.

Germanium pulse diode with a gold-welded contact. Avtom. i prib.
no.1:71-74 '59. (MIRA 13:10)

(Germanium diodes)

Uss/yeu B.I.

807/7778

PHASE I BOOK EXPLANATION

Translation USSR Gosstatizdatyatsiya planovaya komissiya
Automatizatsiya i priborostroyeniye; shornik nauchnykh trudov, VPr. 1.
(Automation and Instrument Making; Collected Scientific Works, No. 1)
Mosc., Gosstatizdat, 1959. 107 p. 3,000 copies printed.
Ed.: V. Bessel'nyy, Tech. Ed.: K. Ousakov; Editorial Board: P.M. Mel'nik
(Chief Ed.), N.T. Zhurav, G.S. Kryukov, I.A. Orlov, (Resp. Ed.),
I.A. Shuybat, and N.V. Yarin.
PURPOSE: This collection of articles is intended for scientific and technical
workers and for students of schools of higher education specializing in
automation, telemechanics, and computing.
COVERAGE: The collection contains papers on the automation of metallurgical,
chemical and power engineering and on the development of new instruments,
telemechanical units, etc. It contains:
A bibliography of scientific analysis of solutions containing 66 items;
42 articles, 24 English, 3 German, 4 French and 1 Polish, is included. 36 per cent
of the articles are written in Russian.

AUTOMATION OF INDUSTRIAL PROCESSES

Korobko, N.I., A.G. Strelchenko, V.M. Kirovskiy, V.I. Kostyuk, — A.I. Tyubko, V.M. Artyukov. Automation System for Open-Hearth Thermal Processes	9
Korobko, N.I., V.I. Kostyuk. Open-Hearth Control System	14
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Sizem, G.A., Yu.I. Kobus, V.Ye. Gilels, V.I. Afanas'yev. Program Control System of Turbine Lathe 134 P	29
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AUTOMATIC EQUIPMENT

Imosov, V.I. Comparison of Methods of Selecting Telemechanic Frequency Codes	40
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AUTOMATIC CONTROL

Shirshov, G.D. New Principle of Control Using High-Speed Nonlinear Controllers for Industrial Processes With Considerable Lag	75
Gritshuk, V.P. and Yu.I. Samoylovko. Approximate Methods for Selecting Optimum Adjustment of Discontinuous Control Systems	80
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L 13058-63

ENP(q)/ENT(m)/BDS AFFTC/ASD JD

S/2927/62/000/000/0095/0101

ACCESSION NR: AT3002987

AUTHOR: Vasil'yev, B. I.; Vdovenkov, A. A.

TITLE: Pulse-type germanium diodes for heavy currents [Report of the All-Union Conference on Semiconductor Devices held in Tashkent from 2 to 7 October 1961]

SOURCE: Elektronno-dy*rochny*ye perekhody* v poluprovodnikakh. Tashkent, Izd-vo AN UzSSR, 1962, 95-101

TOPIC TAGS: pulse germanium diode, germanium diode heavy current

ABSTRACT: An attempt is described to build diffused-junction germanium diodes having a low forward resistance and a high rate of recovery of reverseresistance. Hole-type germanium with a resistivity of 0.2-1 ohm.cm and Sb diffusion donor were used. Static current-voltage characteristics were measured within -65 +100C range. The reverse-resistance-recovery time was measured for 50-800-mA forward currents, 2.5-20-v reverse voltages, and 0.1-5 kohm discharge resistances. Recovery time-temperature relation was determined within -65 +70C range. Detailed data is given in the article. This conclusion is submitted: by using a low-resistivity (0.2-0.3 ohm.cm) material and thin crystals, it is possible to build

Card 1/2

L 13058-63

ACCESSION NR: AT3002987

high-speed Ge diodes with a high operating temperature of junction and with a low forward resistance. Orig. art. has: 4 figures, 2 formulas, and 1 table.

ASSOCIATION: Akademiya nauk SSSR (Academy of Sciences SSSR) Akademiya nauk
Uzbekskoy SSR (Academy of Sciences UzSSR) Tashkentskiy gosudarstvennyy
universitet (Tashkent State University)

SUBMITTED: 00

DATE ACQ: 15May63

ENCL: 00

SUB CODE: 00

NO REF SOV: 000

OTHER: 003

Card 2/2

GLEMBOTSKIY, V.A., prof. doktor tekhn. nauk, otv. red.; VASIL'YEV,
B.K., red.

[Intensification of the flotation process] Intensifika-
tsiia flotatsionnogo protsessa. Moskva, Nauka, 1964. 46 p.
(MIRA 17:12)

1. Moscow. Institut gornogo dela im. A.A.Skochinskogo.

LIDIN, G.D., prof., doktor tekhn.nauk, otv. red.; VASIL'YEV,
B.K., red.

[Air and gas dynamics of mines and mine safety] Rudnich-
naya aerogazodinamika i bezopasnost' gornyykh rabot. Mo-
skva, Nauka, 1964. 205 p. (MIRA 18:1)

1. Moscow. Institut gor'nogo dela im. A.A.Skochinskogo.

PLAKSIN, Igor' Nikolayevich; SHAFYEV, Rafael' Sharifovich;
CHANTURIYA, Valentin Alekseyevich; VASIL'YEV, B.K., red.

[Effect of the surface heterogeneity of minerals on their
interaction with flotation reagents] Vliianie geterogen-
nosti poverkhnosti mineralov na vzaimodeistvie s flotatsion-
nymi reagentami. Moskva, Nauka, 1965. 49 p.
(MIRA 18:4)

AMOSOV, Innokentiy Ivanovich; VASIL'YEV, B.K., red.

[Coal oxidation zone; methods of determining the depth
of the oxidation zone] Zona okisleniia uglei; metodika
opredeleniia glubiny zony okisleniia. Moskva, Nauka,
1965. 90 p. (MIRA 18:7)

VASIL'YEV, B. K.; ZAYTSEV, A. N.; PIS'MENNYI, V. S.

Boxes of crimped cardboard. Standartizatsiya 26 no.10:54-59
(MIRA 15:10)

(Boxes--Standards)

VASIL'YEV, B.K.; BOGDANOV, V.M.

Standardizing shapes and dimensions of nonferrous ingots.
Standartizatsiia 26 no.5:35-39 My '62. (MIRA 15:7)
(Nonferrous ingots--Standards)

BURMISTROV, P.I.; SAMOYLOVICH, S.D.; DEMICHEV, G.M.; KONONOV, V.A.;
EVENCHIK, S.D.; BRODOVSKIY, N.R.; PAVLOV, S.M.; BOEROV,
A.A.; BASKIN, A.I.; SHKOL'NIKOV, S.A.; VASIL'YEV, B.K.;
DRANNIKOV, A.B.; RIKMAN, M.A.; BURAKOV, V.A.; VLADIMIROV,
A.P.; NIKOLAYEVSKIY, G.M.; PETRUSHEV, I.M., red.;
GERASIMOVA, Ye.S., tekhn. red.

[Mechanization of loading, unloading and storing operations in industrial enterprises] Mekhanizatsiia pogruzochno-razgruzochnykh i skladskikh rabot na promyshlennykh predpriyatiyakh. Moskva, Ekonomizdat, 1963. 276 p.

(MIRA 17:2)

VASIL'YEV, B.K.

VASIL'YEV, B.K.

Investigation of the combustion process in a 4-stroke gas turbine engine operating on mixed fuel. Trudy TSNII MPS no.87: 52-75 '54. (MIRA 8:3)
(Gas turbine locomotives)

VASIL'YEV, B.K., kand. tekhn. nauk

Handling of packaged piece goods. Makh. i avtom. proizv. 17
no.6:35-41 Je '63. (MIRA 16:7)

(Loading and unloading)

VASIL'YEV, B.K.

BARANOV, A.F., redaktor; RUDOY, E.F., redaktor; SOLOGUBOV, V.N., kandidat tekhnicheskikh nauk, otvetstvennyy redaktor toma; ALBEGOV, N.A., kandidat tekhnicheskikh nauk; VASIL'YEV, B.K., inzhener; VERSHINSKIY, S.V., kandidat tekhnicheskikh nauk; VINOGRADOV, G.P., kandidat tekhnicheskikh nauk; VINOBUROV, M.V., professor, doktor tekhnicheskikh nauk; GOLOVANOY, V.G., kandidat tekhnicheskikh nauk; GORDEYEV, A.S., dotsent, kandidat tekhnicheskikh nauk; GURSKIY, P.A., dotsent, kandidat tekhnicheskikh nauk; GUREVICH, A.N., kandidat tekhnicheskikh nauk; DOMBROVSKIY, A.B., dotsent; YEGORCHENKO, V.F., professor, doktor tekhnicheskikh nauk; IVANOV, V.N., professor, doktor tekhnicheskikh nauk; KARVATSKIY, B.L., professor, doktor tekhnicheskikh nauk; KOROLEV, K.P., professor, doktor tekhnicheskikh nauk; MUCHKIN, I.N., kandidat tekhnicheskikh nauk; POPOV, G.V., inzhener; PROSKURNEV, P.G., inzhener; SAFON-TSEV, K.A., inzhener; SEMICHASTNOV, I.F., dotsent, kandidat tekhnicheskikh nauk; SLOMYANSKIY, A.V., dotsent, kandidat tekhnicheskikh nauk; STEPANOV, A.D., dotsent, kandidat tekhnicheskikh nauk; SYROMYATNIKOV, S.P., akademik[deceased]; TERNOVSKIY, V.A., dotsent, kandidat tekhnicheskikh nauk; TRUBETSKOY, V.A., kandidat tekhnicheskikh nauk, KHOKHLOV, N.F., kandidat tekhnicheskikh nauk; SHARONIN, V.S., kandidat tekhnicheskikh nauk; SHLYKOV, Yu.P., dotsent, kandidat tekhnicheskikh nauk; YEVFUSHENKO, A.M., kandidat tekhnicheskikh nauk, retsenzent; IVANOV, V.N., professor, doktor tekhnicheskikh nauk, retsenzent; PANOV, N.I., dotsent, kandidat tekhnicheskikh nauk, retsenzent; SLOMYANSKIY, A.V., dotsent, kandidat tekhnicheskikh nauk, retsenzent; UTIYANSKIY, L.I., inzhener, retsenzent; NETYKSA, V.M., professor, doktor tekhnicheskikh nauk, retsenzent;

(Continued on next card)

BARANOV, A.F., -- (Continued) Card 2.

TOPORNIN, G.S., inzhener, retsenzent; DOMBROVSKIY, A.B., dotsent; retsenzent; POYDO, A.A., kandidat tekhnicheskikh nauk, retsenzent; YAKOBSON, P.Ye., laureat Stalinskoy premii; dotsent; kandidat tekhnicheskikh nauk, retsenzent; POPOV, A.A., professor, doktor tekhnicheskikh nauk, retsenzent; PROSKURNEV, P.G., inzhener, retsenzent; SAFONTSEV, K.A., inzhener, retsenzent; SERAFIMOVICH, V.S., kandidat tekhnicheskikh nauk; retsenzent; TRAVIN, P.I., inzhener, retsenzent; FOKIN, K.F., kandidat tekhnicheskikh nauk, retsenzent; SHCHERBAKOV, V.P., inzhener, retsenzent; SHADUR, L.A., dotsent; kandidat tekhnicheskikh nauk, retsenzent; TIKHONOV, P.S., inzhener retsenzent; TKACHENKO, F.D., inzhener; retsenzent; BABICHKOV, A.M. professor, doktor tekhnicheskikh nauk, retsenzent; KOROSTYLEV, A.I. inzhener, retsenzent; LEVITSKIY, V.S., dotsent; kandidat tekhnicheskikh nauk, retsenzent; KLYKOV, A.F., inzhener, retsenzent; SOLOGUBOV, V.N. redaktor; SHISHKIN, K.A., redaktor; SIOMYANSKIY, A.V. redaktor; SALENKO, S.V., redaktor; YUDZON, D.M. tekhnicheskii redaktor.

[Technical reference book for railroad men] Tekhnicheskii spravochnik zheleznodorozhnika. Redaktsionnaya kollegiya: A. F. Baranov, i dr. Glav.redaktor. E. F. Rudoi. Moskva, Gos.transp.zh-el-dor.izd-vo. Vol. 6 [Rolling stock] Podvizhnoi sostav. 1952. 935 p. (MLRA 8:9) (Railroads--Rolling-stock)

AGOSHKOV, Mikhail Ivanovich; BOYARSKIY, V.A., otv. red.;
VASIL'YEV, B.K., red.

[Design and calculation of the systems and technology
for working ore deposits] Konstruirovaniye i raschety
sistem i tekhnologii razrabotki rudnykh mestorozhdenii.
Moskva, Izd-vo Nauka, 1965. 218 p. (MIRA 18:12)

1. Chlen-korrespondent AN SSSR (for Agoshkov).

VASIL'EV, B. L.

(Hydraulic presses for pressing of nonferrous metals) Moskva, Gos. mauchno-tekhn.
izd-vo mashinostroit. lit-ry, 1951. 179 p. (52-20485)

TJ1460.V3

VASIL'EV, B. L.

Television - Receivers and Reception.

Lowering of sensitivity of television sets KVN-49-Radio no. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 195~~2~~ Uncl.

31436

S/122/62/000/001/003/005
D221/D304

1.1400

AUTHOR: Vasil'yev, B.L., Engineer

TITLE: Vibratory machining of metals by pressure

PERIODICAL: Vestnik mashinostroyeniya, no. 1, 1962, 61-62

TEXT: The expediency of limiting the swing of swaging tools has led the author to design a new type of rotary forging machine, in which an eccentric rotor is mounted within a second hollow rotor. The latter is provided with a slot for a split die and a hammer head with a roller. The rotors revolve in opposite directions, thus producing impacts on the workpiece and ensuring a maximum transfer of energy. The prototype was made in 1960 at the Novosibirsk factory "Tyazhtankogidropress", and worked quietly and without knocks. A new model for complex shapes like turbine blades, can be designed as a further step. The outside surface of the internal rotor and the inside of the hollow rotor are than tapered. The die is closed and forms a nest which corresponds to the contour of the workpiece. The working rotor slides along its axis

Card 1/2

31436

Vibratory machining ...

S/122/62/000/001/003/005
D221/D304

to the right or left and only the hollow rotor can rotate. The blank is placed when the working rotor is shifted to the right. Then the rotor returns to its initial working position. During the rotation of the hollow rotor, whose center does not coincide with that of the working rotor, blows are produced on the blank which then fills the cavities of the form. A recent design of a press with vibratory actuation is described and illustrated. The blank is held in the die by two cylinders, and a vibratory action is provided by an out-of-balance drive which produces 1500 blows per minute. Blades made in aluminum and steel alloys 40X4MA (40KhNMA) and X1742 (Kh17N2) in the cold and hot states were machined. The investigation demonstrated that an increase in the frequency of impacts produced a more uniform deformation which resulted in finer grain and a greater hardness. This method permits greater accuracy in machining than hammering and pressing. The author suggests its wide introduction, and unification of designs. There are 3 figures and 2 Soviet-bloc references.

Card 2/2

VASIL'YEV, B.M. (poselok Dedovichi, Pskovskaya oblast').

Self-made device for taking feces for bacteriological analysis. Fel'd. 1
akush. no.6:57 Je '53. (MLRA 6:7)

(Laboratories-- Apparatus and supplies)

VASIL'YEV, B.M., kand.med.nauk (Leningrad)

Methodology of neurosurgical anesthesiology. Vop. neurothir. 27
no.3:13-16 My-Je '63. (MIRA 1963)

1. Kafedra neyrokhirurgii (nachal'nik - B.A.Samotokin) Voenno-
meditsinskoy ordena Lenina akademii imeni Kirova, Leningrad.

VASIL'YEV, B.M.; BNSPALOV, G.S.

Osteogenic sarcoma of the thyroid. Vest.khir. 75 no.3:
118-121 Ap '55.

(MLRA 8:7)

1. Iz 1-y fakul'tetskoy khirurgicheskoy kliniki (nach.-prof. V.N. Shamov) i kafedry patologicheskoy anatomii (nach.-prof. A.N.Chistovich) Voenno-meditsinskoy ordena Lenina akademii im. S.M.Kirova.
(THYROID GLAND, neoplasms,
sarcoma, osteogenic)
(SARCOMA,
thyroid gland, osteogenic)

V. I. SAMOKHVALOV, V. I., mayor meditsinskoy sluzhby; RUSHKOV, S. V.; VASIL'YEV,
B. M.; ZAKHARENKO, S. V.; SUKOVATYKH, L. S., starshiy leytenant
meditsinskoy sluzhby

Using bicillin in surgical practice. Voen.-med.zhur. no.10;40-44
O '56. (MIRA 10:3)

(PENICILLIN) (SURGERY)

VASIL'YEV, B.M. (Leningrad, 53, V.O. 1-ya, d.24, kv.17)

Chlorvinyl drain with expandable intracavitary fixator similar to Petzer's catheter. Vest.khir. 80 no.5:118-120 My '58 (MIRA 11:7)

1. Iz fakul'tetskoy khirurgicheskoy kliniki No.1 Voenno-meditsinskoy ordena Lenina akademii im. S.M. Kirova (nach. - prof. V.N. Shamov).
(DRAINAGE, apparatus and instruments,
chlorvinyl drain with expandable intracavitary fixation
(Rus))

VASIL'YEV, B.M.

Intraperitoneal administration of bicillin; experimental data.
Antibiotiki 4 no.1:101-104 Jan '59. (MIRA 12:5)

1. Klinika fakul'tetskoy khirurgii No.1 (nachal'nik kliniki -
deystvitel'nyy chlen AMN SSSR prof. V.N.Shamov) Voenno-
meditsinskoy ordena Lenina akademii imeni S.M.Kirova.
(PENICILLIN, admin.

benzathine penicillin G, intraperitoneal
admin. in animals (Rus))

VASIL'YEV, B.M. (Leningrad, Vasil'yevskiy ostrov, 1-ya liniya, d.24, kv.17)

Local application of antibiotics for the prevention and therapy of peritonitis; experimental investigation. Vest.khir. 83 no.8:101-106 Ag '59. (MIRA 13:1)

1. Iz fakul'tetskoy khirurgicheskoy kliniki No.1 (nach. - prof. V.N. Shamov) Voenno-meditsinskoy ordena Lenina akademii im. S.M. Kirova.
(ANTIBIOTICS pharmacol.)
(PERITONITIS exper.)

USSR / Farm Animals. Small Horned Stock

Q

Abs Jour: Ref Zhur-Biol., No 5, 1958, 21468

Author : Vasil'yev B. M.

Inst :

Title : Some Problems of Sheep Management in Central Kazakhstan (Nekotoryye voprosy sistemy soderzhaniya ovets v Tsentral'nom Kazakhstane)

Orig Pub: Ovtsevodstvo, 1957, No 8, 10-12

Abstract: No abstract.

Card 1/1

23

VASIL'YEV, B.M.; NAGORNYI, Yu.M.

Problems of a correct agricultural system for the stockbreeding
zone of Dzhambul Province. Vest.AN Kazakh.SSR 16 no.3:11-20 Mr
'60. (MIRA 13:6)

(Dzhambul Province--Agriculture)

CHURIN, Kh.D., kand. sel'khoz. nauk, dots.; VASIL'YEV, B.M., dots.;
BELOV, A.I., kand. ekon. nauk; ASHIRYAYEV, Sh.V., dots.;
TSYPKIN, G.I., kand. sel'khoz. nauk; KAPLINA, G.T., dots.;
ANDRONOV, I.G., dots.; VASIL'YEV, V.I.; KONDION, A.K.,;
MAKAROV, A.P., nauchnyy sotr.; ZHIZNEVSKIY, F.V., red.;
MOSIYASH, S.P., red.; KRINITSKIY, V.A., red.; NACIBIN, P.,
tekhn. red.

[Economics of Kazakhstan agriculture] Ekonomika sel'skogo kho-
ziaistva Kazakhstana. Alma-Ata, Kazsel'khozgiz, 1962. 325 p.
(Kazakhstan--Agriculture--Economic aspects) (MIRA 16:3)

SALYUKOV, P.A., kand. biol. nauk; VERNIGOR, V.A., kand. sel'khoz. nauk; KORM'ANOVSKAYA, M.A., kand. sel'khoz. nauk; GOLODNOV, A.V.; SKOROBOGATOV, Yu.A., mladshiy nauchnyy sotr.; MALLITSKIY, V.A., kand. sel'khoz. nauk; CHASHCHIN, B.V., kand. sel'khoz. nauk; PONOMAREV, P.P., kand. tekhn. nauk; BARMINTSEV, Yu.N., doktor sel'khoz. nauk; NECHAYEV, I.N., mlad. nauchnyy sotr.; POZDNYAKOV, P.M., kand. biol. nauk; KOVIN'KO, D.A., kand. biol. nauk; BALANINA, O.V., kand. sel'khoz. nauk; MOISEYEV, K.V., kand. sel'khoz. nauk; ROMANOV, P.F., kand. veter. nauk; PAL'GOV, A.A., kand. veter. nauk; ANAN'YEV, P.K., kand. veter. nauk; VASIL'YEV, B.M., kand. sel'khoz. nauk; ABDULLIN, V.A., kand. ekon. nauk; GALIAKBEROV, N., laureat Gos.premii, kand. sel'khoz. nauk, red.; GUSEVA, N., red.; NAGIBIN, P., tekhn. red.

[Reference book for zootechnicians] Spravochnik zootekhnika.
Pod red. N.Galiakberova. Alma-Ata, Kazsel'khozgiz, 1963.
492 p. (MIRA 16:5)

(Kazakhstan--Stock and stockbreeding)

VASIL'YEV, B.N., kapitan 1-go ranga v otstavke

Course laid with fire. Mor. sbor. 48 no.2:92-93 F '65.
(MIRA 18:11)

VASIL'YEV, B.N. (Leningrad)

Stressed and strained state of a manometer tube. Izv.
Ak. SSR. Mekh. no. 4: 139-144. J1-Ag '65.

(MIRA 18:12)

VASIL'YEV, B. N., Cand Phys-Math Sci -- (diss). "On the Properties of Substances in the Adsorbed State According to Data of the Study of Carbon Dioxide Adsorption within ^{the broad} ~~wide~~ Range of Temperatures and Pressures." Mos, 1957. 7 pp (Acad Sci USSR, Inst of Physical Chemistry), 100 copies. Mimeographed (KL, 48-57, 104)

- 1 -

VASIL'YEV, B.N. (Tbilisi)

Perforation of simple ulcer of the small intestine associated with
inflammation of Meckel's diverticulum. Vest.khir. 80 no.5:112-113
(MIRA 11:7)

My '58

(MECKEL'S DIVERTICULUM, Complications,
diverticulitis with perf. ulcer of small intestine (Rus))
(INTESTINE, SMALL, ulcer,
perf. in Meckel's diverticulitis (Rus))

CHERTKOV, S.N., podpolkovnik meditsinskoy sluzhby; VASIL'YEV, B.N., podpolkovnik meditsinskoy sluzhby

Use of aminopeptide in surgery. Voen.-med.zhur. no.12:48-49 '59.
(MIRA 14:1)

(OPERATIONS, SURGERY)

(PEPTIDE)

VASIL'YEV, B.N.

USSR/Physical Chemistry - Surface Phenomena, Adsorption, Chromatography, Ion Interchange.

B-13

Abs Jour: Referat. Zhurnal Khimiya, No 2, 1958, 3995.

Author : B.N. Vasil'yev, B.P. Bering, M.M. Dubinin, V.V. Serpinskiy.

Inst : Academy of Sciences of USSR.

Title : Study of Adsorption Under High Pressure.

Orig Pub: Dokl. AN SSSR, 1957, 114, No 1, 131-134.

Abstract: The CO₂ adsorption on two silica gel specimens in the range from -85 to +40° and under the pressure of from 0 to 85 atm was studied using the instrument described earlier (RZhKhim, 1957, 74788). The adsorption hysteresis loop is observed only in the range from -60 to -20°. The isotherms of -30 and -50° bring to a not coinciding distribution of pore volumes according to their radii. The total substance content differs noticeably under high pressures from Gibbs' adsorption. It is shown that the mean density ρ_a of CO₂ in the adsorbed state

Card : 1/2

-5-

"APPROVED FOR RELEASE: 08/31/2001

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APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858820012-6"

VASIL'YEV, B. N.

3.2430(1421,2806)

3334
S/560/61/000/010/002/016
D299/D302

172450
AUTHORS:

Mandel'shtam, S. L., Tindo, I. P., Voron'ko, Yu. K., Shurygin, A. I., and Vasil'yev, B. N.

TITLE:

Study of solar X-radiation. I. Geophysical-rocket measurements

SOURCE:

Akademiya nauk SSSR. Iskusstvennyye sputniki Zemli. no. 10. Moscow, 1961, 12-21

TEXT: This is the first of 3 investigations on X-radiation in the range below 10 \AA carried out by research rockets and the 2nd and 3rd Sputniks. Provisional results of these measurements were set forth in brief in an earlier study. Experimental method: The measurements described in the present article were carried out during the flight of 2 research rockets. The prime object of the measurements was to accumulate experimental data and to develop a method for subsequent measurements by means of

Card (1/5)

3324
S/560/61/000/010/002/016
D299/D302

Study of solar...

earth-satellites. As detectors, photon counters were used, as these are more sensitive in the spectral range $< 10 \text{ \AA}$ than vacuum photomultipliers. The sensor unit was placed on the instrument container which turned automatically towards the sun. Special precautions were taken to ensure that no corpuscular radiation should interfere with the measurements. In the first launching, the sensor unit incorporated 2 similar counters directed towards the sun; one of the counters had a magnetic shield, and the other had none. In the second launching, both counters had magnetic shields, but the second counter was at an angle of 15° towards the sun, recording non-solar radiation only. Standard counters of type CBT-9 (SBT-9) were used. The characteristics of the counters are described. The counting rate was calculated from the telemetered data. The 2 rockets were launched on July 21, 1959, in the morning and evening respectively. On that day, the solar activity was intense. Results: A figure shows the dependence of the counting rate on altitude.

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3:30A

S/560/61/000/010/002/016
D299/D302

Study of solar...

A considerable X-ray flow was recorded from altitudes of 95 km up. Owing to the stability of orientation of the container with respect to the sun, it was unnecessary to make allowance for the angular dependence of counter efficiency. From the counting-rate data, the energy distribution and the magnitude of the energy flux outside the atmosphere were calculated. The data processing was based on the expression $m_{incl} = m_{vert} \Phi(z)$,

where m_{incl} is the mass of an inclined air-column of 1 cm^2 cross-section lying between the apparatus and the sun, m_{vert} -- the mass of a vertical column equal to the atmospheric pressure at the given altitude, and $\Phi(z)$ is determined by the zenith angle of the sun z . A figure shows the counting rate as a function of m_{incl} . Assuming the spectral region under investigation to be continuous, it is possible to construct the photon-distribution curve by means of the counting-rate curves, the mass

Card 3/5

Study of solar...

2/26/61/000/010/002/016
D799/D799

coefficients of absorption of air, and the spectral-sensitivity curve of the counters. A figure shows the photon-distribution curves as a function of wavelength. The energy distribution in the morning and evening launchings was found to differ by a factor of 3. It is difficult to ascertain whether this difference is real. The main source for the continuous radiation is electron bremsstrahlung in the field of hydrogen and helium ions. The obtained electron temperature considerably exceeded the value of $T_e \approx 1 \div 3 \times 10^6$ °K obtained in subsequent investigations by space-ships. A comparison of measurements conducted by Friedman (in 1953) during a minimum-period of solar activity with the authors' measurements (in December 1960, by space-ship) after a maximum-phase showed that the temperature and intensity of radiation are greatly dependent on the phase of the sun cycle. As the above-described rocket investigations were carried out for very low positions of the sun above the horizon (in contra-

Card 4/5

33304

S/560/61/000/010/002/016
D299/D302

Study of solar...

distinction to Friedman's investigations), further systematic measurements are required. In ensuing articles, the results of measurements carried out on the 2nd and 3rd Sputniks will be given, as well as a description of the electronic equipment. There are 11 figures and 20 references: 8 Soviet-bloc and 12 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: G. Elwert, J. Geophys. Res., 66, 391, 1961; H. Friedman, Trans. Intern. Astr. Un., 10, 706, 1960, Cambridge Univ. Press; T. A. Chubb, H. Friedman, R. W. Kreplin, J. Geophys. Res., 65, 1831, 1960; R. W. Champion, R. A. Minzner, Plan. and Space Science, 1, 259, 1959. X

SUBMITTED: May 17, 1961

Card 5/5

37195

S/560/61/000/011/001/012

EO52/E514

3.2430
3.2100

AUTHORS:

Mandel'shtam, S.L., Tindo, I.P., Voron'ko, Yu.K.,
Vasil'yev, B.N. and Shurygin, A.I.

TITLE:

Studies of solar X-ray emission. II

SOURCE:

Akademiya nauk SSSR. Iskusstvennyye sputniki Zemli.
no.11. Moscow, 1961. Rezul'taty nauchnykh
issledovaniy, provedennykh vo vremya poletov vtorogo
i tret'yego kosmicheskikh korabley-sputnikov, 3-14

TEXT:

In a previous paper (Ref.1: Iskusstvennyye sputniki
Zemli, no.10, Izd-vo AN SSSR, 1961, p.12) the authors reported
measurements of the intensity of solar X-ray emission below 10 Å
which were carried out with the aid of geophysical rockets. In
the present paper they report the corresponding results obtained
with the second and third Soviet spaceships on August 19-20 and
December 1-2, 1960. The aim of the measurements was to investi-
gate the intensity over an extended period of time (of the order
of a day or two). Preliminary results have been given by the
authors in another paper (Ref.2: Dokl. AN SSSR, 140, 1058, 1961).
The second spaceship carried six end-window photon counters
(15 mg/cm² beryllium foils) with an oxygen-neon quenching mixture.
Card 1/3

* S/560/61/000/010/002/016

Studies of solar X-ray emission.II S/560/61/000/011/001/012
E032/E514

These counters were developed under the direction of I. A. Prager and S. M. Perel'man. The counters had a sensitivity of between 0.1 and 0.2 pulses/photon in the wavelength range 3-7.5 Å. The counters were mounted so that their axes were oriented along six directions at equal angles to each other; the field of view of each counter was 45°. The telemetric record showing the counting rate as a function of time is reproduced. It is estimated that the flux of radiation in the range 2-10 Å, which was recorded during the flare of August 19 (15 hr 33 min) was of the order of $7 \cdot 10^{-5} - 1.5 \cdot 10^{-2} \text{ erg cm}^{-2} \text{ sec}^{-1}$. The apparatus mounted on the third spaceship was somewhat modified. Three types of probes were employed so that the solar radiation below 10 Å could be continuously monitored together with interference due to radiation-belt particles. The main detectors were two parallel-connected CBT-9 (SBT-9) counters with mica windows (1.6 mg cm^{-2}) and located in a lead screen 1 mm thick. The counters were supplied by solar batteries. In addition, there were two "control counters" which were mounted at right angles to the direction of the sun. A tantalum plate was placed in front of the counter

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Studies of solar X-ray emission.II S/560/61/000/011/001/012
E032/E514

windows and served as a target for the radiation-belt particles. The counters were practically insensitive to solar X-ray radiation. A third pair of counters was mounted on the outersurface of the third spaceship. These counters were similar to those carried by the second spaceship. The aim was to estimate the spectral energy distribution by comparing the indications of the beryllium and the mica counters. The telemetric record obtained with the aid of the third spaceship is reproduced. It is estimated that the flux of radiation below 10 \AA was $2.5 \cdot 10^{-4} \text{ erg cm}^{-2} \text{ sec}^{-1}$. Moreover, the intensity of radiation in this spectral region remained constant within $\pm 20\%$ during the observations. This was due to the fact that on December 1-2, 1960 the sun was very quiet and there was only one flare (importance 1^+). The question of the flux and the energy of the particles recorded in these experiments is being examined at the present time. There are 10 figures and 2 tables.

SUBMITTED: June 26, 1961

Card 3/3

3.2420 (1049, 1482)

29115

S/020/61/140/005/011/022
B104/B102

AUTHORS: Vasil'yev, B. N., Voron'ko, Yu. K., Mandel'shtam, S. L.,
Tindo, I. P., and Shurygin, A. I.

TITLE: Preliminary results of a study of solar x-radiation by means
of rockets and space ships

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 140, no. 5, 1961, 1058-1061

TEXT: By means of two geophysical rockets (July 21, 1959, altitude 105 km), the second space ship (August 19-20, 1960, altitude of perihelion 305 km, aphelion 320 km), and the third space ship (December 1-2, 1960, perihelion 180 km, aphelion 249 km), solar radiation in the spectral range below 10 Å was studied. End-window photon counters with aluminum coated (2μ) mica windows (1.6 mg/cm^2 , $d = 4 \text{ mm}$) were attached outside the apparatus container which left the rocket and turned automatically to the sun. By means of magnetic systems, the windows of counters were shielded from 15-20 kev electrons which might cause bremsstrahlung. At an altitude of 95 km, the counting rate of counters oriented toward the sun increased. This radiation was considered to be

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29115
S/020/61/140/005/011/022
B104/B102

Preliminary results of a...

an x-radiation. Using data of V. V. Mikhnevich et al. (Izv. AN SSSR, ser. geofiz., no. 11, 1393 (1957)) results of measurement were extrapolated for the boundary of atmosphere. Radiation fluxes ($2 \cdot 10^8$ Å) obtained were $7.3 \cdot 10^{-4}$ and $3.2 \cdot 10^{-4}$ erg/cm².sec. On the second space ship, six end-window photon counters with beryllium windows (0.1 mm thick, 7 mm in diameter) were used. Counters were arranged vertical to each other. The counting rate amounted to some thousand pulses/sec when the counters were exposed to solar radiation. On that part of the orbit which was in the earth's shadow it was some ten pulses/sec (cosmic background), and reached high values only when the orbit approached the outer radiation belt. From the results of measurements in the shadow region, the authors concluded that a radiation from the radiation belt did not occur below 30-40° north and 20-30° south. A radiation flux of $7.6 \cdot 10^{-4}$ erg/cm².sec was obtained. On the third space ship, two counters with mica windows (1.6 mg/cm², $d = 4$ mm) covered on both sides with aluminum foils (5μ) were switched in parallel. These two counters were oriented toward the sun. Two other counters of the same type were arranged vertical to the former. Tantalum plates were located in front

Card 2/4

29115

S/020/61/140/005/011/022

B104/B102

Preliminary results of a...

of the windows of these control counters. They recorded radiation caused by slowing down electrons in the tantalum plates. In the instrument container two other beryllium window counters were installed. Thus, it was possible to separate the background of x-radiation caused by electrons from the solar x-radiation. An x-radiation flux of $2.4 \cdot 10^{-4}$ erg/cm².sec was obtained in the range 2-10 Å. The electron temperature of solar radiation in the spectral range investigated was estimated to be $\sim 2 \cdot 10^5$. I. S. Shklovskiy (Izv. Krymsk. astrofiz. obs., 4, 80 (1949)), T. V. Kazachevskaya and G. S. Ivanov-Kholodnyy (Astr. zhurn., 36, 1022 (1959)), S. N. Vernov and A. Ye. Chudakov (Usp. fiz. nauk, 70, no. 4, 586 (1960)), and L. V. Kurnosova et al. (Sborn. Iskusstvennyye sputniki Zemli, no. 10 (1961)) are mentioned. There are 4 figures and 7 references: 5 Soviet and 2 non-Soviet. The three most recent references to English-language publications read as follows: T. A. Chubb, H. Friedman, R. W. Kreplin, J. Geophys. Res., 65, no. 6, 1831 (1960); H. Friedman, Astronautics, no. 11, 42, 128 (1960); J. A. Van Allen, L. A. Frank, Nature, 183, 430 (1959).

Card 3/4

Preliminary results of a...

29115
S/020/61/140/005/011/022
B104/B102

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR
(Physics Institute imeni P. N. Lebedev of the Academy of
Sciences USSR)

PRESENTED: May 24, 1961, by D. V. Skobel'tsyn, Academician

SUBMITTED: April 19, 1961

Card 4/4

VASILYEV, B. N.

MANDELSETAN, S. L., VASILYEV, B. N., VORONKO, Yu. K., TILDO, K. P., SHURYGIN, A.

"Measurements of Solar X-ray Radiation"

Soviet Papers Presented at Plenary Meetings of Committee on Space Research
(COSPAR) and Third International Space Symposium, Washington, D. C.,
23 Apr - 9 May 62

MANDELSHTAM, S. L., TINDO, I. P., VORON'KO, Yu. K., VASILYEV, B. N. and SHURYGIN, A. I.

"The Intensity of The X-ray Radiation of The Sun Near The Short-Wave
Edge of The Spectrum"

report presented at the 13th Intl. Astronautical Federation Congress (FAI)
Varna, Bulgaria, 23-29 Sep 1962

VASIL'YEV, B. N.

S/020/62/142/001/015/021
B104/B102

AUTHORS: Mandel'shtam, S. L., Veron'ko, Yu. K., Tindo, I. P.,
Shurygin, A. I., and Vasil'yev, B. N.

TITLE: Study of solar X-ray emission during the total solar eclipse
on February 15, 1961

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 142, no. 1, 1962, 77-80

TEXT: The shortwave range ($< 10 \text{ \AA}$) of the solar spectrum was examined with photon counters described in previous papers of the authors (DAN, 140, no. 5, 1058 (1961); Sborn. Iskusstvennyye sputniki Zemli, (a) no. 10, 1961, p. 13; (b) no. 11, 1961, p. 3). A. P. Lukirskiy helped in determining the spectral sensitivity of the apparatus at the Leningradskiy gosudarstvennyy universitet (Leningrad State University), using a method of Lukirskiy, M. A. Rumsh, and L. A. Smirnov (Optika i spektroskopiya, 2, 505 (1960)). The counters had been developed under the supervision of I. A. Prager and S. M. Perel'man. The counter block was mounted on the outside of the instrument container of a geophysical rocket. The counters always faced the Sun. The container reached an altitude of about 96 km. The emission

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S/020/62/142/001/015/021
B104/3102

Study of solar X-ray emission ...

of the solar corona is continuous in the spectral region in question and has no intense lines. The energy distribution of solar emission and the energy flux in the spectral range under consideration were determined from the variations of the count rate with altitude, with the spectral sensitivity of the counters, and with the mass absorption coefficient of air (Fig. 3). The emission of the totally covered corona in the spectral range in question had an intensity of $4 \cdot 10^{-4}$ erg/cm²·sec. The shortwave part of the solar spectrum is emitted from all those parts of the corona, in which the 5303 Å line is also excited. There are 4 figures, 1 table, and 7 references: 4 Soviet and 3 non-Soviet. The two references to English-language publications read as follows: O. Elwert, J. Atm. Terr. Phys., 12, 187 (1958); J. Geophys. Res., 66, 391 (1961).

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR
(Physics Institute imeni P. N. Lebedev of the Academy of Sciences USSR)

PRESENTED: July 4, 1961, by A. A. Blagonravov, Academician

SUBMITTED: June 27, 1961

Card 2/2

MANDEL'SHTAM, S.I.; VASIL'YEV, B.N.; VORON'KO, Yu.K.; TINDO, I.P.;
SHURYGIN, A.I.; FETISOV, E.N.

"Of the short-wavelength end of the sun spectrum by means of
satellites and rockets."

Report presented at the Spectroscopicum, 11th Intl. ^{Colloq.} Colloq,
Belgrade, Yug, 30 Sep - 4 Oct 63.

L 17159-63 EWT(1)/FCC(w)/FS(v)-2/BDS/EEC-2/ES(v) AEDC/AFFTC/
 ASD/AFMDC/ESD-3/APGC Pe-4/Pg-4/Pi-4/Pl-4/Po-4/Pq-4 TT/GW 101
 ACCESSION NR: AT3006863 S/2560/63/000/015/0085/0091 96

AUTHOR: Vasil'yev, B. N.; Shurygin, A. I.; Tindo, I. P.;
Voron'ko, Yu. K.

TITLE: Study of x-ray radiation from the sun. III. Electronic
 equipment

SOURCE: AN SSSR. *Iskusst. sputniki Zemli*, no. 15, 1963, 85-91

TOPIC TAGS: radiation, solar radiation, x-ray, x ray radiation,
 solar x ray radiation, counter, radiation counter, Geiger counter,
 telemetry, telemetry transmitter, TM transmitter, satellite, sput-
 nik 6, sputnik, sputnik 5

ABSTRACT: A detailed description is given of x-ray measuring equip-
 ment carried on Soviet geophysical rockets and later on Sputniks 5
 and 6 [animal-carrying satellites of August and December 1960],
 whose purpose was to record soft x-ray radiation from the sun using
 photon counters of the Geiger type. The rockets had one counter

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ACCESSION NR: AT3006863

continuously oriented toward the sun and a reference counter set 15° away from the sun. Sputnik 5 carried six identical counters, hard-mounted outside the instrument compartment on opposite ends of three mutually orthogonal axes and all feeding into a common counting and storage channel. Sputnik 6 carried three variants as follows: 1) sun-tracking counters with mica windows; 2) sun-tracking reference counters, also with mica windows, which recorded bremsstrahlung from sun-oriented tantalum deflection plates; and 3) two fixed counters with beryllium foil windows. Each counter set fed its own counting and storage circuitry as shown in Fig. 1 of the Enclosure. In general, a Geiger counter output was fed to a blocking oscillator pulse-shaping stage, then to binary trigger elements and divider stages, and finally to the telemetry encoding unit and/or memory stage. The main difference between the rocket and sputnik systems was that the former had no storage but telemetered the count continuously, whereas the sputniks could store the count over a daily period and transmit it on command from a ground station. In the sputniks the memory circuitry registered a count every three minutes; thus the difference

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ACCESSION NR: AT3006863

between two successive total counts on readout yielded a mean count rate. Sputnik 5 was able to transmit the current count directly in addition to storing it; Sputnik 6 did not have this direct transmission feature. The pulse shapers, triggers, dividers, and encoders were transistorized and mounted as separate subassemblies in a hermetically sealed container connected to the Geiger counter. Schematics are given for each of these stages, together with descriptions of circuit functions, including temperature compensation to ensure stable operation over the $\pm 50^\circ\text{C}$ range. Performance limits of the counter systems were as follows: 1) rocket mounted counters had an impulse rate of 0.1 to 3000 per sec; 2) Sputnik 5 counters had an impulse storage rate of 0.1 to 5000 per sec and a total storage capacity of 2^{20} pulses; and 3) Sputnik 6 counters had an impulse storage rate of 0.1 to 5000 per sec and a total capacity of 2^{17} pulses for the mica aperture counter and 2^{20} pulses for the beryllium aperture type. A functional diagram of a Sputnik counter system is shown in Fig. 2 of the Enclosure. "The authors thank the project's director Prof. S. L. Mandel'shtam. The authors also thank M. A. Minayev, V. F. Sukhanov and I. T. Shepovalov who participated in the preparation and operation of the devices described."

Card

3183

VASIL'YEV, B.N.

Pumping Machinery

Increasing the durability of water-pump packing. Avt.trakt. prom. No. 3, 1952

9. Monthly List of Russian Accessions, Library of Congress, June 1952, Uncl.

VASILYEV, B. N.

USSR/Miscellaneous - Auto engines

Card 1/1 : Pub. 12 - 6/15

Authors : Vasilyev, B. N.

Title : Mechanical engine losses of the "Moskvich" automobile

Periodical : Avt. trakt. prom. 2, 14-21, Feb 1954

Abstract : The mechanical losses of the small liter-capacity Moskvich automobile engine, were investigated by a group of engineers of the Moscow Automobile Plant. The engine losses were checked at various load and speed conditions. Measures for the reduction or complete elimination of mechanical engine losses were introduced. Graphs; illustration.

Institution : The Low Liter-Capacity Automobile Plant, Moscow

Submitted :

VASIL'YEV, B.N.

307/2543

PHASE I BOOK EXPLOITATION

26(1.4)

Академия наук СССР. Лаборатория двигателей

Теория, конструирование, расчет и испытание двигателей внутреннего сгорания (Theory Design, Calculation and Testing of Internal Combustion Motors), Moscow, Izdatel'stvo MFTS, 1958. 174 p. (Series: It's: trudy, vyp. 4) Karta slip inserted. 3,000 copies printed.

Ed. of Publishing House: V.M. Klementov; Tech. Ed.: T.A. Prusakova; Editorial Board: M.D. Apashev, Doctor of Technical Sciences, M.N. Zavratin, Candidate of Technical Sciences, Yu. B. Sviridov, Candidate of Technical Sciences, S.Z. Irantsev, Engineer, and K.G. Yevgrafov, Engineer.

FOREWORD: This book is intended for workers of scientific research institutes, students of schools of higher education (unives), design bureaus, and to promote exchange of experimental information on the thermodynamics of internal combustion engines.

CONTENTS: This collection consists of 14 articles based mainly on research work done by the author in 1955-1956. Part I is devoted to working processes in gas turbine power plants and to theoretical and experimental work connected with investigation of the flow of gases. Part II contains articles on the investigation of processes in piston engines. Part III deals with the measurement of high temperatures of gases. The collection is number 4 of the Transactions of the Engine Laboratory of the Academy of Sciences, USSR. No personalities are mentioned. There are no references.

10. Klementov, V.M. [deceased], and Yu. B. Sviridov. Development of Air-Cooled Engines in Czechoslovakia. Descriptions and technical data for 8 types (T-37, T-11A, T-11B, T-312, T-500, T-603, T-603B) of the Tatra air-cooled engines are given. Ejector air cooling systems are explained at some length.

11. Sviridov, Yu. B., and B.A. Zavratin. Flame-pilot Ignition in Small Engines. The article is concerned with the comparison of flame-pilot ignition and normal ignition. A diagram of the experimental assembly is given. Results are shown on graphs and by formulas. There are 4 Soviet references.

12. Vasil'yev, B.N., and L.P. Gavrilov. Friction of Parts in the Piston Component of the GAZ-20 Engine. Mechanical losses in automobile engines of type GAZ-20 were investigated in the Engine Laboratory of the USSR Academy of Sciences in cooperation with the Gorkiy Automobile Plant. Data are given in the form of tables and graphs. Tests were made to improve future engine design. There are 4 references: 3 Soviet, and 1 English.

13. Zavratin, B.A. Unification of Transport Engines Operating on Various Types of Fuel. Part II. Justification for Establishing Unified Engine Families and part of an article published in the trudy laboratorii dvigatelay, Nr. 3. On the basis of the analysis in this article the author concludes that the unification of engines of various powers and operating on various fuels is indicated from the point of view of production, convenience in operation and general economy.

PART III. METHOD AND APPARATUS FOR INVESTIGATIONS

14. Zavratin, B.A., and B.M. Kuznetsov. Method of Nonstationary Measurement of High Temperatures of Gases. The author defines the method of measurement, deduces equations of the ideal curve, describes the construction and experimental verification of the instrument. The author concludes that the method of nonstationary measurement of high temperatures is based on the possibility of calculating the true temperature of a gas by the temperature curve of the flow indicated by a thermocouple.

VASIL'YEV, B.N., kand. tekhn. nauk; GAVRILOV, L.F., inzh.

Determining power consumption by automobile engine units. Vest.
rash. 38 no.3:21-24 Mr '56. (MIRA 11:2)
(Automobiles--Engines)

SPECHKIN, B.S., akademik, glavnyy red.; SVIRIDOV, Yu.B., zam.otv.red.;
APASHEV, M.D., red.; BRILING, N.R., red.; VASIL'YEV, B.M., red.;
VOINOV, A.N., red.; ZAGRYAZKIN, N.N., red.; GORSHKOV, G.B.,
red.izd-va; MAKAGONOVA, I.A., tekhn.red.

[Combustion and carburetion in diesel engines; proceedings of the
scientific and technical conference organized by the Engines
Laboratory in June 1958] Sgoranie i smesseobrazovanie v dizeliakh;
trudy nauchno-tekhnicheskoi konferentsii, provedennoi v iune
1958 g. Laboratorii dvigatelei. Moskva, 1960. 238 p.
(MIRA 14:2)

1. Akademiya nauk SSSR. Laboratoriya dvigateley. 2. Chlen-
korrespondent AN SSSR (for Briling). 3. Laboratoriya dvigateley
Akademii nauk SSSR (for all, except Gorshkov, Makagonova).
(Diesel engines)

L 04588-67 FSS-2/EWT(1)/EGG TT/GW

ACC NR: AP6033398

SOURCE CODE: UR/0293/66/004/005/0748/0754

AUTHOR: Vasil'yev, B. N.

ORG: none

TITLE: Measuring solar ¹²x-ray emission with satellite-borne instruments ¹²

SOURCE: Kosmicheskiye issledovaniya, v. 4, no. 5, 1966, 748-754 ^{9m}

TOPIC TAGS: radiation measurement, solar x radiation, *satellite data analysis,*
solar satellite

ABSTRACT: The instrumentation carried by the Elektron-2 and Elektron-4 satellites to measure solar x-ray emission in the 2—10 Å and 8—18 Å spectral regions is described. A block-diagram of the measuring system is shown in Fig. 1. The entire system consisted of two blocks of separate counters mounted externally, and a block of radio electronic equipment located inside the satellite. The main block of counters was placed on a self-orientation system (toward the Sun). The optical axis of the second block, which was rigidly attached to the satellite surface, coincided with the dead zone center of the main block. The viewing angle of the second block was $\pm 30^\circ$. Geiger photon counters with 25-mg/cm² beryllium windows, sensitive in the 2—8 Å region, and Geiger counters with 2.7-mg/cm² aluminum windows, sensitive in the 8—18 Å region, were used to record the x-ray emission. Other aluminum counters, additionally shielded with thin gold or silver foil, were employed as control counters

Card 1/3

UDC: 523.72 : 539.107.42

60
B

L 04588-67

ACC NR: AP6033398

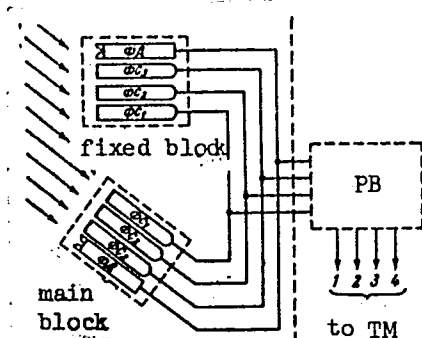


Fig. 1. Block-diagram of the satellite-borne x-ray measuring system

FS₁ - Beryllium counter; FS₂ - aluminum counter; FS₃ - control counter; FD - photo-transducer; RB - radioelectronic block; TM - outputs to the telemetry system memory unit.

in each of the two blocks. The control counters, which were only slightly sensitive to the 'soft x-ray emission, measured the level of noise caused by particles from radiation belts. Silicon phototransducers kept the Sun in the field of view of the two blocks of photon counters. Pulses from similar counters were directed to a common measuring channel. The pulse repetition frequency was approximately proportional to the emission intensity. The parameters of the counters remained unchanged after 10^{10} pulses were recorded and after operation at temperatures from -40 to +50C. The radioelectronic section of the system included three identical channels for measuring the pulse repetition rate from the x-ray photon counters, a phototransducer

Card 2/3

L 04588-67

ACC NR: AP6033398

0

signal indication channel, a reset unit, and a stabilized power supply block. The section operated normally at temperatures ranging from -10 to +40C with variation in the supply voltage from 12 to 18 v. The pulse counting rate was recorded with an accuracy of $\pm(15\% - 17\%)$. On 2 February 1964 the counters recorded solar x-ray emission fluxes of 3.3×10^{-4} erg/cm². sec in the 2-8 Å region, and 2.4×10^{-3} erg/cm². sec in the 8-18 Å region (The sensitivity threshold was 1×10^{-5} erg/cm². sec, and 1.5×10^{-4} erg/cm². sec, respectively). Orig. art. has: 6 figures.

SUB CODE: 03/ SUBM DATE: 20Apr64/ ORIG REF: 004/ ATD PRESS: 5100

Card 3/3 afs

L 29104-66 EWT(1)/FCC/FSS-2 GW

ACC NR: AR5018942

SOURCE CODE: UR/0269/65/000/007/0052/0052

AUTHOR: Mandel'shtam, S. L.; Vasil'yev, B. N.; Voron'ko, Yu. K.; Tindo, I. P.;
Shurygin, A. I.; Fetisov, Ye. N.

43
B

ORG: none

TITLE: Studies of the shortwave end of the Sun's spectrum with the help of satellites and rockets

SOURCE: Ref. zh. Astronomiya. Otdel'nyy vypusk, Abs. 7.51.431

REF SOURCE: Tr. Komis. po spektroskopii. AN SSSR, v. 1, 1964, 36-54

TOPIC TAGS: sun, solar radiation intensity, solar radiation, solar corona

TRANSLATION: Experimental and theoretical studies were made of the Sun's radiation in the spectrum area of $\lambda < A$. It was established that this radiation has a continuous spectrum and is dependent on the recombination of electrons and "heavy" ions in the solar crown. Various tests of the electron temperature in radiation areas of the crown gave values within limits of $(1.5 - 4)10^6 \text{ }^\circ\text{K}$; the flow of radiation at the edge of the Earth's atmosphere is $(2-8)10^{-4} \text{ erg/sm}^2 \text{ sec}$. References 13. Authors' resume.

SUB CODE: 03 / SUBM DATE: none

Card 1/1 CC

L 12995-66 EWT(1)/FCC/EWA(h) GW

ACC NR: AR6000794

SOURCE CODE: UR/0169/65/000/009/A013/A013

SOURCE: Ref. zh. Geofizika, Abs. 9A75

AUTHOR: Mandel'shtam, S. L.; Vasil'yev, B. N.; Voron'ko, Yu. K.; Tindo, I. P.;
Shurygin, A. I.; Fetisov, Ye. N.

TITLE: Using artificial satellites and rockets to study the short-wave end of the solar spectrum

CITED SOURCE: Tr. Komis. po spektroskopii. AN SSSR, vyp. 1, 1964, 36-54

TOPIC TAGS: solar radiation, artificial earth satellite, solar corona

TRANSLATION: Solar radiation was experimentally and theoretically studied in the spectral region with wavelengths shorter than 10 angstroms. It was found that the radiation has a continuous spectrum and is due to recombination of electrons and "heavy" ions in the solar corona. Various experimental measurements of the electron temperature in the radiating regions of the corona gave values lying between 1.5 and $4 \cdot 10^6$ Kelvin; the radiation flux at the boundary of the terrestrial atmosphere is $2 \cdot 8 \cdot 10^{-4}$ erg/cm²·sec.

SUB CODE: 08, 22/
Card 1/1 HW

UDC: 523.72:629.195.2:629.192.2/3

L 01473-02

ACCESSION NR: AP5015521

UR/0286/65/000/008/0057/0057

1958

Orig. art. has: 1 figure.

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Card 1/3

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APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858820012-6"

VASIL'YEV, B.P.; PROLOV, P.N.

New type of a 36-ton forging press. Kus.-shtam. prelav. 7 no.8:
29-32 Ag '65. (MIRA 18:9)

VASIL'YEV, B.P. (Kotlas)

Island shelves in the North Atlantic. Priroda 53 no.5:
86-87 '64. (MIRA 17:5)

VASIL'YEV, B.P., inzh.

Systems for the counteraction of bending moments acting on the movable crosspieces and the columns of large presses. [Nauch. trudy] ENIKMASHa 11:121-135 '65.

Effect of the compressibility of the fluid on the speed of movement of hydraulic actuating mechanisms. Ibid. 135-142 (MIRA 18:6)

NOVOZHILOV, Mikhail Galaktionovich, doktor tekhn. nauk, prof.;
TARTAKOVSKIY, Boris Nuzinovich; BARSUKOV, Mikhail
Ivanovich; VASIL'YEV, B.K., red.

[Designing a technology for open-pit mine construction
by using continuous techniques] Proektirovanie tekhnolo-
gii stroitel'stva kar'erov pri primeneniі tekhniki
nepreryvnogo deiatviia. Moskva, Nauka, 1965. 110 p.
(MIRA 18:9)

KHRUSHCHOV, M.M., prof., doktor tekhn. nauk, otv. red.; MAKIL'YEV,
B.K., red.

[Plastics in sliding bearings; investigations and experience
in their use] Plastmassy v odishipnikakh skol'zheniya; issledo-
vaniya, opyt primeneniya. Moskva, Nauka, 1965. 183 p.
(MIRA 18:9)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut
mashinovedeniya.

VASIL'YEV, B. P.

PHASE I BOOK EXPLOITATION

SOV/5658

Ivanov, Aleksandr Petrovich, Candidate of Technical Sciences, and
Viktor Dmitriyevich Lisitsyn, Candidate of Technical Sciences,
eds.

Modernizatsiya kuznechno-shtampovogo oborudovaniya (Moderni-
zation of Die-Forging Equipment) Moscow, Mashgiz, 1961. 226 p.
Errata slip inserted. 10,000 copies printed.

Reviewer: V. Ye. Nedorezov, Candidate of Technical Sciences; Ed.
of Publishing House: T. L. Leykina; Tech. Ed.: A. A. Bardina;
Managing Ed. for Literature on Machine-Building Technology
(Leningrad Department, Mashgiz): Ye. P. Naumov, Engineer.

PURPOSE: This book is intended for foremen, machinists, designers,
and process engineers concerned with the modernization and de-
signing of die-forging equipment. It may also be used by students
at schools of higher education.

COVERAGE: The book contains material presented at the Conference

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Modernization of Die-Forging Equipment

SOV/5658

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on Problems in the Modernization and Operation of Die-Forging Equipment, held in November 1958 in Leningrad. The Conference was called by Leningradskiy Sovet narodnogo khozyaystva, Sektsiya obrabotki metallov davleniyem Leningradskogo oblastnogo pravleniya NTO Mashprom (Leningrad Council of the National Economy, Section of Metal Pressworking at the Leningrad Oblast Board of the Scientific and Technical Society of the Machine Industry) and Leningradskiy mekhanicheskii institut (Leningrad Mechanical Engineering Institute). Actual problems in the modernization, operation, and repair of die-forging equipment are described. Analyses are provided for problems involved in the mechanization and automation of die-forging and stamping operations. Also included are practical data to be used in the modernization of equipment. No personalities are mentioned. There are 59 references: 56 Soviet, 2 German, and 1 English.

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Modernization of Die-Forging Equipment

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3. Methods and means for the experimental investigation of
die-forging equipment (V. I. Zaytsev and M. P. Pavlov,
Candidates of Technical Sciences)

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Bibliography

AVAILABLE: Library of Congress

VK/wrc/ec
11-7-61

Card 8/8

ACC NR: AP7002613 (A, N) SOURCE CODE: UR/0413/66/000/023/0128/0128

INVENTOR: Vasil'yev, B. P.; Davydova, R. G.; Platonov, V. N.

ORG: None

TITLE: A device for automatic control of a hydraulic vibrator. Class 58, No. 189312
[Experimental Scientific Research Institute of Forging and Pressing Machine Building
(Eksperimental'nyy nauchno-issledovatel'skiy institut kuznechno-pressovogo
mashinostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966, 128

TOPIC TAGS: hydraulic device, metal press

ABSTRACT: This Author's Certificate introduces a device for automatic control of a hydraulic vibrator, specifically for a hydraulic vibration press operating from a constant high-pressure source of working fluid. The unit contains high-speed pulser valves for feeding the working fluid to the cylinder of the working element and a device for filling the cavities above the valves. Vibration frequency is increased and control is simplified by making the device for filling these cavities in the form of a single-stage unit consisting of a chamber located in the cylinder housing where a hydropneumatic cushion is set up for pressure control of a relief valve.

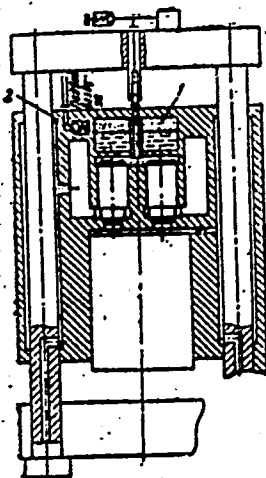
UDC: 621.226

Card 1/2

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2729

ACC NR: AP7002613



1—chamber; 2—relief valve

SUB CODE: 13/ SUBM DATE: 04Nov64

Card 2/2

L 00894-66 ENT(d)/ENT(m)/ENA(d)/ENP(v)/ENP(t)/ENP(k)/ENP(h)/ENP(b)/ENP(l)/ENA(c)
JD/HW

ACCESSION NR: AT5017687

UR/3000/65/000/011/0131/0134

AUTHOR: Vasil'yev, B. P. (Engineer)

TITLE: Bending moment compensating systems acting on the moving traverse and columns of large presses

SOURCE: Moscow. Eksperimental'nyy nauchno-issledovatel'skiy institut kuznechno-pressovogo mashinostroyeniya. /Nauchnyye trudy/, no. 11, 1965. Novyye kuznechno-pressovyye mashiny (New forging machines), 127-134

TOPIC TAGS: hydraulic press, metal forming, metal forming press

ABSTRACT: Systems which make the resultant force from all cylinders on multicylinder hydraulic presses coincide with the resultant of the resisting forces to prevent bending moments in the traverse and columns are discussed. A U.S. system proposed by Leon Mollick and James Jursik (Heavy Presses: Strain Gages Stand Guard - "Steel" vol. 140, 1957, No. 4, pg. 92-93) is briefly mentioned. A system developed at VNIIMETMAShem by B. V. Rozanov and V. P. Lintz (Avtomaticheskoye ustraneniye perekosa traversy v gidravlicheskiykh pressakh - "Kuznechno-shtampovoye proizvodstvo," 1961, No. 6) is shown in Fig. 1 on the Enclosure. It has 4 cylinders (I-IV) located at the 4 corners of the movable traverse. The upper and lower chambers of diagonally opposed cylinders are cross-connected. Lines 1 and 2 have

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L 00891-66

ACCESSION NR: AT5017687

two auxiliary cylinders which activate the supply and exhaust valves. If the load resultant is at e, the compensating system activates all four cylinders to balance the eccentricity. Although this system is much simpler than the U.S. system, its stability must be carefully considered. It was found that it could meet stability and accuracy requirements only at particular operating conditions. Some instabilities were encountered after a system of this nature was installed in a press operated at 32 Mn/m^2 with a stroke of 2000 mm. It has also been found that, during normal pressing operations, short periods of high eccentricity transients exist, and that during these periods the compensating system is too slow. In such a case the pressing velocity can be decreased to improve the accuracy. Such a variable speed system was developed for a 300-Mn press as shown in Fig. 2 on the Enclosure. In this system the traverse speed is proportional to the rotation of shaft 9 which is controlled by a hydraulic motor. The speed of the motor can be varied by a hydraulic cam follower. Orig. art. has: 10 figures and 2 formulas.

ASSOCIATION: Eksperimental'nyy nauchno-issledovatel'skiy institut kuznechno-pressovogo mashinostroyeniya (Experimental Scientific Research Institute of Forging and Pressing Machine Construction)

SUBMITTED: 00

ENCL: 02

SUB CODE: IE

NO REF SOV: 001

OTHER: 001

Card 2/4

ENCLOSURE: 01

L 00894-66
ACCESSION NR: AT5017687

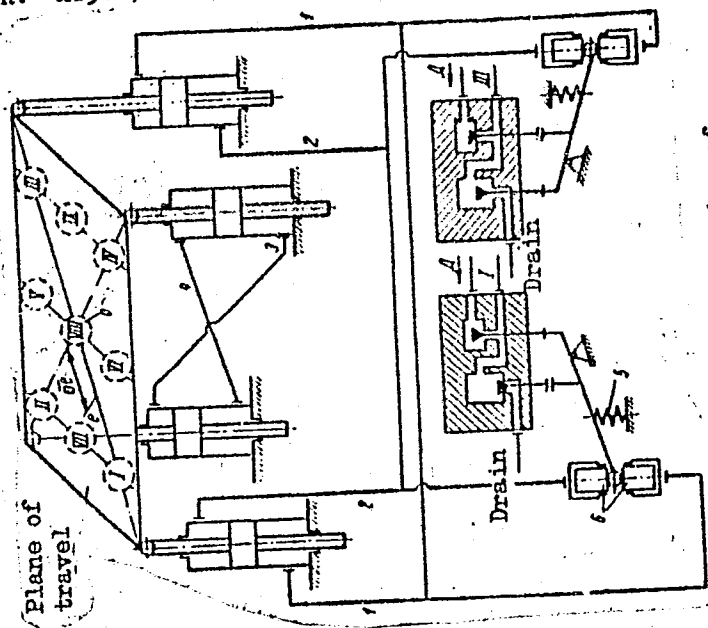


Fig. 1. Schematic drawing of compensating system

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ACCESSION NR: AT5017687

ENCLOSURE: 02

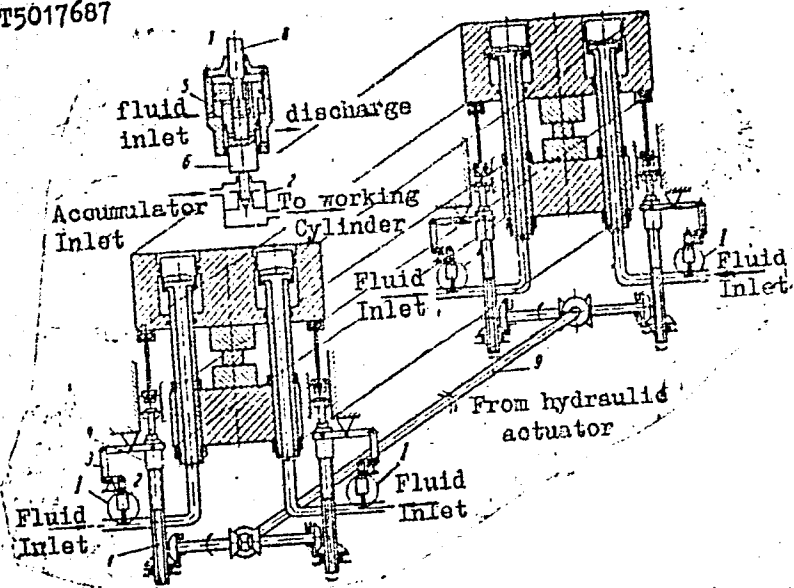


Fig. 2. Variable-stroke speed compensating system

Card 4/4

VASIL'YEV, B.P.; LEVITA, D.Ya.

Hydraulic control apparatus for performing automatic operations
by a group of hydraulic cylinders in required sequence. Kuz.-shtam.
proizv. 4 no.7:30-33 J1 '62. (MIRA 15:7)
(Hydraulic control)

TUPITSYN, K.K.; VASIL'YEV, B.P.

Analysis of the synchronization system of a hydraulic process.

Trudy Inst. avtom. i elektrometr. SO AN SSSR no.6:86-94 '64.

(MIRA 17:10)

L 05314-67 ENP(k)/ENT(d)/ENT(m)/ENP(h)/ENP(w)/ENP(v)/ENT(t)/ENT(u)/ENT(v)

ACC NR: AM6015331

Monograph
IJP(c) EM/FDN/JD/HW

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Vasil'yev, B. P., ed.

Hydraulic presses; some structures and designs (Gidravlicheskiye pressy; nekotorye konstruktsii i raschety) Moscow, Izd-vo "Mashinostroyeniye," 1966. 435 p. illus., biblio., tables. 6700 copies printed.

TOPIC TAGS: hydraulic press, press design, hydraulic drive, press performance control, new controlling device, press capacity, servo control system, actuating mechanism

PURPOSE AND COVERAGE: This book is intended for engineering personnel of machine-building organizations engaged in designing and operating hydraulic press equipment. It may also be useful to students specializing in these fields. The book reviews designs of some modern hydraulic presses used for different purposes and systems of their control. New hydraulic and electric devices for controlling the performance of presses are described and theoretical problems and calculations of various press drives are analyzed. Methods of calculating hydraulic servo-systems controlling actuating mechanisms and speed regulators with mechanical reversible connections are discussed. Data obtained by investigation of stresses in basic parts of presses are presented. Over ten Soviet plants, including

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UDC: 621.226